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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

CASE NO. GNR-E-02-01

**REBUTTAL TESTIMONY OF CLINT KALICH
REPRESENTING AVISTA CORPORATION**

I. INTRODUCTION

Q. Please state your name, business address, and present position with Avista Corporation.

A. My name is Clint Kalich. My business address is 1411 East Mission Avenue in Spokane, Washington. The Company employs me as the Manager of Resource Planning and Analysis working in the Energy Resources Department.

Q. Have you provided direct testimony in this proceeding?

A. Yes.

Q. What is the scope of your rebuttal testimony?

A. Both Mr. Gruber and I discuss variable adjustments to arrive at a solution potentially acceptable to all parties in this proceeding. Specifically, I detail an averaging method to arrive at the SAR and natural gas escalation variables. Mr. Gruber addresses the need for moving away from a one-hundred percent Sumas gas price to a more representative 50%/50% Sumas/AECO mix, and the potential of adopting Mr. Sterling's method to determine a starting natural gas price. I provide testimony that describes the resultant avoided cost rates if the Commission adopts the discussed adjustments. I compare the results both to the rates stayed by the Commission and to the rates under the Company's proposal from direct testimony.

Q. Are you sponsoring any exhibits in this testimony?

A. Yes. I am sponsoring one exhibit marked as Exhibit No. 202. I prepared the exhibit personally.

II. SAR RESOURCE VARIABLES

Q. Has the Company reviewed the various party positions on SAR assumptions?

A. Yes. A comparison is shown below. Because the parties provided estimated costs in both 2000 (IPUC Staff and Avista) and 2002 prices (PacifiCorp and Idaho Power), and it is important that the values be in consistent dollar years for comparison, the 2000 values were escalated using the actual Implicit Price Deflator for 2001 and an estimate of 2.4 percent for 2002.

**SAR Assumption Values
2002 prices**

<u>Party</u>	<u>Plant</u>	<u>Fixed</u>	<u>Variable</u>	<u>Capacity</u>	<u>Heat</u>	<u>Annual Escalation</u>		
	<u>Cost</u>	<u>O&M</u>	<u>O&M</u>	<u>Factor</u>	<u>Rate</u>	<u>SAR</u>	<u>O&M</u>	<u>Tilt</u>
	(\$/kW)	(\$/kW/yr)	(\$/MWh)		(Btu/kWh)			
Avista	603.74	8.48	2.93	89.50%	7,340	2.40%	2.40%	2.40%
IPUC Staff	710.46	11.20	2.93	92.00%	7,100	2.10%	2.70%	2.10%
Idaho Power	729.00	9.48	3.31	92.00%	6,994	2.52%	2.52%	2.52%
PacifiCorp	632.00	7.00	1.61	92.00%	7,074	2.00%	2.50%	2.50%
Average	668.80	9.04	2.69	91.38%	7,127	2.26%	2.53%	2.38%

The table illustrates that some parties included higher plant costs, but then included lower O&M costs and/or higher heat rates. For example, Avista proposed the lowest plant cost based on a 2x1 plant configuration from the NWPPC, but then included mid-range O&M figures and the highest heat rate. On the other hand, Idaho Power proposed the highest plant cost but the lowest heat rate.

1 Q. The Company and Commission Staff referenced NWPPC assumptions for SAR
2 costs, yet the assumptions are quite different. Please explain why the Company's values differ
3 from those of Commission Staff.

4 A. It appears that Commission Staff used an earlier draft NWPPC CCCT assumptions
5 dated July 12, 2002. The Company used a set of assumptions from the NWPPC dated July 15,
6 2002. Between July 12th and July 15th the NWPPC made a significant assumption change
7 regarding the CCCT configuration. The Generation Resource Advisory Committee decided to
8 move from a single-train configuration to a "two-on-one" configuration around the time of this
9 proceeding.¹ The result of the two-on-one configuration is lower initial capital and ongoing
10 O&M costs, as represented by the Company's filing.² The Company agrees with witness
11 Widmer in that this newer, lower-cost, configuration better represents the SAR.

12 Q. What conclusions has the Company drawn from reviewing the various proposals?

13 A. The Company has analyzed each of the SAR assumption proposals using the
14 avoided cost model with the Company's recommended (NWPPC) natural gas price forecast, its
15 forecast of surplus power prices, and a 2007 deficit year. By keeping the non-SAR assumptions
16 constant, the impacts of merely varying the SAR assumptions can be viewed. The results are
17 shown in the following table for contracts beginning in both 2002 and 2007. Given the range of
18 outcomes, the Company has concluded that averaging the SAR assumptions proposed by each
19 party recommending such changes (i.e., Commission Staff, Idaho Power, PacifiCorp, and the

¹ A single-train configuration consists of one gas turbine, one heat-recovery steam generator ("HRSG"), and one steam turbine, whereas a "two-on-one" configuration consists of two gas turbines, two HRSGs, and one steam turbine

² On direct the Company incorrectly represented the NWPPC's Fixed O&M value as \$14.75 in 2000 dollars. The Company has corrected this value to be \$8.10, escalated to 2002 dollars in this filing.

Company) would provide a reasonable representation of the SAR variables were the Commission not to adopt the specific values recommended by this Company.

Comparison of SAR Assumption Impacts on Avoided Cost Rates 20-year contract rates starting years 2002 and 2007, 2007 deficit year

<u>Party</u>	<u>Fueled</u>		<u>Non-Fueled</u>	
	<u>2002</u> (\$/MWh)	<u>2007</u> (\$/MWh)	<u>2002</u> (\$/MWh)	<u>2007</u> (\$/MWh)
Avista	19.61	14.86	37.38	47.26
Independent Energy	21.50	18.59	39.29	51.03
PacifiCorp	18.47	12.83	35.60	44.05
Idaho Power	20.91	17.23	37.84	48.09
IPUC Staff	20.69	16.79	37.88	48.13
Average	19.92	15.42	37.17	46.87

* Non-Fueled prices for each proposal are based upon NWPPC gas price forecast

** Market prices are based on Company proposal

III. NATURAL GAS PRICE ESCALATION

Q. Has the Company reviewed the various natural gas price escalation rates proposed by the parties to this proceeding?

A. Yes. The proposed rates vary from between 1.97 percent to 4.40 percent escalation, as shown below:

O&M and Natural Gas Price Escalation

<u>Party</u>	<u>O&M</u>	<u>Gas Escalation</u>	
	<u>Esc.</u> (percent)	<u>Nominal</u> (percent)	<u>Real</u> (percent)
Avista	2.40	3.27	0.87
Ind. Energy	3.21	3.10	(0.11)
PacifiCorp	2.50	1.97	(0.53)
Idaho Power	2.52	2.62	0.10
IPUC Staff	2.70	4.40	1.70
Average	2.67	3.07	0.41

1 The average escalation rate of 3.07 percent is modestly lower than the Company's
2 original proposal (3.27%), but provides a middle of the road value for avoided cost rates.

3 Q. Does the Company have any specific concerns with the proposed forecasts that it
4 wishes to address at this time?

5 A. The Company does not agree with Mr. Trippel's position that the recent turn by the
6 electric industry to natural gas turbine generation plants supports moving to the medium-high
7 NWPPC price forecast. The NWPPC in its *Draft Fuel Price Forecasts for the 5th Northwest*
8 *Conservation and Electric Power Plan* explains that natural gas consumption in the Northwest
9 could double over the next twenty years; and, that such an event would not be unprecedented.
10 According to the NWPPC, natural gas consumption in the Northwest doubled during the 1986 to
11 2000 period. Even with this increase, natural gas prices actually fell in real terms (-0.7%
12 annually) during the period, as shown on page one of my exhibit. In any event, recognition by
13 the NWPPC of the potential for natural gas consumption to double over the next twenty years
14 indicates that it is aware of the issue and has reflected it in its forecasts. It therefore is an error to
15 assume that the NWPPC's medium price forecast is too low.

16 17 **V. RESULTANT AVOIDED COST RATES**

18 Q. What would avoided cost rates for the Company be were the Commission to
19 average the SAR assumptions and natural gas escalation assumptions as explained above, adopt
20 the 5-year 50%/50% Sumas/AECO average gas price discussed by Company Witness Gruber,
21 and accept the Company's recommended Surplus Power values?

A. The Non-Fueled and Fueled project avoided cost rates are shown on page two of Exhibit No. 202. The table below, showing the modifications as "Adjusted Rates," details twenty-year Non-Fueled rates, depending on the starting year of the contract and using a starting natural gas price of \$2.905/dth. Rates vary from \$36.38 per MWh for contracts beginning in 2002 to \$45.43 per MWh for contracts beginning in 2007. Twenty-year Fueled rates vary from between \$19.94 per MWh for contracts beginning in 2002 to \$15.47 per MWh for contracts beginning in 2007.

**Comparison of Avoided Cost Rate Calculations for Avista
20-year contracts beginning in 2002 and 2007**

	<u>Fueled</u>		<u>Non-Fueled</u>	
	<u>2002</u>	<u>2007</u>	<u>2002</u>	<u>2007</u>
	(\$/MWh)	(\$/MWh)	(\$/MWh)	(\$/MWh)
Stayed Rates	26.25	24.18	58.24	89.48
Original Proposal	19.61	14.86	37.38	47.26
% reduction from Stayed Rates	-25.3%	-38.5%	-35.8%	-47.2%
Adjusted Rates	19.92	15.42	36.35	45.38
\$/MWh change from Original Proposal	0.30	0.55	(1.03)	(1.88)
% reduction from Stayed Rates	-24.1%	-36.2%	-37.6%	-49.3%

Q. How do these values compare to the Company's original proposal and the stayed avoided cost rates?

A. The resultant avoided cost rates using the Company's original proposal are attached as page three of my exhibit. The values for 20-year contracts are shown in the table above. For twenty-year Fueled contracts, avoided cost rates under the Company's original proposal are between \$0.33 and \$0.55 per MWh *lower* as described in the table above. For twenty-year Non-Fueled contracts, the Company's original proposal generated rates that are between \$1.03 and

1 \$1.88 per MWh *higher* than the Adjusted Rates shown above. Taken together, the 20-year
2 Adjusted Rates are between 24 and 49 percent lower than the Stayed Rates.

3 Q. Does this conclude your rebuttal testimony?

4 A. Yes it does.